

with both hypertension and heart disease. In the high WHR group there was an increased association with nodal OA, defined clinically as nodes in at least two rays of each hand (OR=1.7 (1.0-3.0)  $p=0.063$ ). A similar effect on sub-setting the WHR by BMI and associated increase in metabolic co-morbidities was observed in the overweight male knee OA group.

**Conclusions:** Consistent with previous literature in other OA cohorts, BMI is a major risk factor for hip and knee OA in both men and women. We have found that WHR, WC and HC are not independent measures of BMI. However, sub-setting the WHR by BMI has indicated that the different body fat distribution in obese women may affect co-morbidities and degree of other joint involvement. The mechanism is uncertain but may be linked to systemic metabolic effects.

## P227

### THE IMPACT OF CONCOMITANT PERSISTENT BACK PROBLEMS IN PEOPLE LIVING WITH HIP AND KNEE OSTEOARTHRITIS

G.A. Hawker<sup>1</sup>, M. Gignac<sup>2</sup>, E. Badley<sup>3</sup>, A. Davis<sup>2</sup>, M. French<sup>1</sup>, A. Gordon<sup>4</sup>, S. Romans<sup>5</sup>

<sup>1</sup>Women's College Hospital, Toronto, ON, Canada, <sup>2</sup>Toronto Western Research Institute, Toronto, ON, Canada, <sup>3</sup>Toronto Western Hospital Research Research Unit, Toronto, ON, Canada, <sup>4</sup>Mount Sinai Hospital, Toronto, ON, Canada, <sup>5</sup>Centre for Research in Women's Health, Toronto, ON, Canada

**Purpose:** Arthritis affects participation in broad roles and societal activities like employment, social involvement, personal relationships, and leisure activities. Generalized osteoarthritis (OA) typically affects the low back as well as the hips and knees. No studies have examined the impact of concomitant back problems on participation in people with hip and knee OA.

Among people with long-standing hip and knee OA, our objective was to examine the impact of concomitant back problems on participation in life tasks.

**Methods:** An existing cohort of older community-living individuals with long-standing hip or knee OA were interviewed by telephone to determine their socio-demographics (age, gender, education, income), height and weight to calculate body mass index (BMI), general health (SF-36 general health scale), hip/knee pain and disability (WOMAC pain and physical function scores), the presence of persistent back problems (present/absent), pain attitude (Pain Catastrophizing Scale) and pain coping (Vanderbilt Pain Coping Scales for active and passive pain coping), depressive symptoms (CES-D) and social support (Lubben Social Network Scale). Participation was measured using the Jette Late-Life Disability Measure, which asks about *frequency* (How often do you do a certain activity?) of performance of everyday life tasks. Responses were compared for those who did and did not report persistent back problems, using t-tests for continuous variables and Chi square test for categorical variables. Multivariable linear regression was used to assess the effect of persistent back problems on each of frequency and capability of participation after adjusting for potential confounders. Results based on the first 293 survey participants are reported here.

**Results:** Of 293 participants, the mean age was 77 years (65-96 years); 221 (75.4%) were female. Mean BMI was 28.3 kg, 94% were Caucasian, 52% had  $\geq 2$  comorbid conditions, and 52% had an annual household income  $\leq$  \$20,000 Canadian. 116 individuals (39.5%) reported persistent back problems. Those who reported persistent back problems were similar to those who did not in age, education, income, BMI, and level of social support. However, those with persistent back problems reported worse general health ( $p=0.009$ ), more depressed mood ( $p=0.005$ ), greater pain and functional disability ( $p<0.0001$  for

both), lower active and higher passive coping and pain catastrophizing scores ( $p=0.02$ ,  $p=0.0002$ , and  $p=0.01$ , respectively). Adjusting for these differences, individuals with persistent back problems had reduced frequency of participation in everyday life tasks ( $p=0.002$ ) but were similar to those without back problems in terms of their perceived limitation in capability to participate ( $p=0.51$ ).

**Conclusions:** In a community cohort with long-standing hip/knee OA, nearly half reported concomitant persistent back problems. Beyond the added burden in terms of pain and disability, individuals with concomitant back problems are participating in everyday life tasks significantly less than those without. Lack of participation negatively impacts life satisfaction and quality of life. Greater attention is needed to development and testing of interventions designed to improve participation in OA.

## P228

### PREVALENCE OF MUSCULOSKELETAL COMPLAINTS IN MEXICO. A POPULATION STUDY

R. Espinosa<sup>1</sup>, L. Hernández<sup>2</sup>, C. Arroyo<sup>2</sup>

<sup>1</sup>National Rehabilitation Institute, Mexico City, Mexico, <sup>2</sup>National Institute of Public Health, Mexico City, Mexico

**Purpose:** To know the frequency, distribution and risk factors of musculoskeletal complaints in Mexican Population.

**Methods:** Cross-sectional home survey study. The National Health Surveys 2000 (NHS 2000) in Mexico, was done between September of 1999 to March of the 2000; the sample of homes was probabilistic, multi-stage, stratified and conglomerate. The NHS 2000 has different surveys. One of this is the adult survey, it has demographic data, perception of health, use of services in health and question about musculoskeletal complaints (pain and inflammation in different joints), the musculoskeletal complaints in adult population of NHS 2000 were analyzed. Statistical Analysis: Point prevalence of musculoskeletal complaints using descriptive statistic analysis among age, sex and state of Mexico was done. A logistic regression model was done for estimating odd ratio of risk factors.

**Results:** Samples of 45,294 subjects were interviewed 48% men and 52% women and an estimate population of 51.6 millions was calculated. The mean national prevalence of MSC was 26.2%, MSC of lower limbs is higher (23.5%) compared with MSC of upper limbs 15.4%, the prevalence difference between extremities was similar in all age groups studied ( $p < 0.01$ ). The mean prevalence of MSC by joints and sex were: hip: 7.4% men (M) and 12.7% women (W); knee 14.3% M vs. 17.1% W; foot and ankle 3.12% M y 3.13% W; first finger of foot 4.70% M y 6.80% W; shoulder 7.40% M vs. 10.5% W; elbow 5.4% M vs. 7.90% W; hand 7.4% M vs. 12.7% W. ( $p < 0.01$  between H vs. W). We

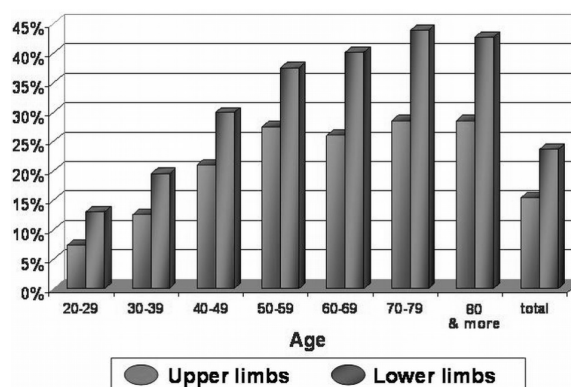


Fig. 1. Prevalence of MSC by limbs.